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[Continued on next page]

(54) Title: GAMMA-BUTYROBETAINE HYDROXYLASE ORIGINATED FROM NEUROSPORA CRASSA

49 kDa — *** BBH

Lane 1 : Protein molecular size marker, Lane 2 : E.coli BL21 w/o g -BBH gene,

Lane 3: E.coli BL21 w/g -BBH gene and induced by 1mM IPTG

(57) Abstract: Disclosed is a polynucleotide encoding γ-butyrobetaine hydroxylase (γ-BBH) originating from Neurospora crassa. Also disclosed are a recombinant vector comprising the polynucleotide, a transformant transformed with the recombinant vector, γ-BBH encoded by the polynucleotide, and a method of preparing L-camitine, which comprises hydroxylating γ-butyrobetaine using γ-BBH encoded by the polynucleotide.

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